

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/701,661	FENG, WEISHI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Linh V Nguyen	2819	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/05/03.
2. ☒ The allowed claim(s) is/are 1-99.
3. ☒ The drawings filed on 11/05/03 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date <u>11/05/03</u></li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____.</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
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### **DETAILED ACTION**

This office action is in response to application # 10/701661 filed on 11/05/03. Claims 1 – 99 are pending on this application.

#### ***Allowable Subject Matter***

1. Claims 1 - 99 are allowed.
2. The following is an examiner's statement of reasons for allowance:

With respect to claims 1, 12, 25, 35, 47 and 58, in addition to other elements in the respective claim, the prior art does not teach a system and method data dependent scrambler having an encoder that selectively interleaves adjacent symbols in said scrambled user data sequence if an all-zero symbol is produced by bit interleaving, that identifies a pivot bit that is adjacent to said all-zero symbol if interleaving is performed, and that replaces said all-zero symbol with an all-one symbol if said pivot bit is zero.

With respect to claims 71, 80, and 90, in addition to other elements in the respective claim, the prior art does not teach a system and method data dependent descrambler having a decoder that processes pairs of said symbols, that selectively interleaves adjacent symbols in said scrambled user data sequence when an all-zero symbol is present and that replaces an all-one symbol with an all-zero symbol and interleaves said adjacent symbols when one of said adjacent symbols is an all-one symbol and another of said adjacent symbols is not an all-zero symbol.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should

Art Unit: 2819

preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wilkinson U.S. Patent No. 6,243,496.

Kunisa et al. U.S. Patent No. 6,079,041.

Brody et al. U.S. Patent No. 6,718,501.

Kobayashi et al. U.S. Patent No. 5,898,394.

Keirn et al. U.S. Patent No. 6,177,890.

Chen et al. U.S. Patent No. 6,778,104.

Kurokawa et al. U.S. Patent No. 6,737,996.

Ahn et al. U.S. Patent No. 6,531,968.

Hogan U.S. Patent No. 6,278,386.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh Van Nguyen whose telephone number is (571) 272-1810. The examiner can normally be reached from 8:30 – 5:00 Monday-Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Tokar can be reached at (571) 272-1812.

Art Unit: 2819

The fax phone numbers for the organization where this application or proceeding is assigned are (703-872-9306) for regular communications and (703-872-9306) for After Final communications.

LVN

08/31/2004

  
Michael Tokar  
Supervisory Patent Examiner  
Technology Center 2800